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**EXECUTIVE SUMMARY  
THE INSTITUTIONALIZATION OF PRIVATE SECTOR  
STRATEGIC PLANNING METHODS IN A PUBLIC  
SECTOR RESEARCH & DEVELOPMENT  
ORGANIZATION  
THE NAVAL SURFACE WARFARE CENTER CASE  
1982-1989**

**BY FRANCIS EDWARD BAKER, JR.  
COMBAT SYSTEMS DEPARTMENT**

**1 FEBRUARY 1990**

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**NAVAL SURFACE WARFARE CENTER**

Dahlgren, Virginia 22448-5000 • Silver Spring, Maryland 20903-5000

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| <p>This MIT Sloan School of Management thesis describes the development, implementation, and institutionalization of private sector corporate-style strategic planning methods in a public sector federal government Department of Defense research and development organization. Corporate-style strategic planning means using a formal integrative strategic planning process whose cornerstone is the segmentation of the organization's activities into strategic business units (SBUs). The role and mission of industrial organizations are key drivers or forcing functions in the process of executive motivation to plan and manage strategically. The U.S. federal system does not, by its design, provide the key driving forces nor foster the planning for efficient strategic management.</p> <p>In 1980, internal and external environmental conditions raised the level of management's attention at the Naval Surface Warfare Center (NSWC) to the need for a means which would provide a cohesive focus toward</p> |           |   |   |                                  |                             |
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19. (Cont.)

the Center's mission and permit some control in shaping its future destiny. As a result of undertaking strategic planning, the organization has accrued numerous tangible and intangible benefits from having worked through the process for three cycles and from having managers who think more strategically. NSWC has ownership of core skills that has led to a firm-specific advantage (FSA). This FSA endogenous to NSWC is an intangible advantage when competing for and deploying limited public assets.

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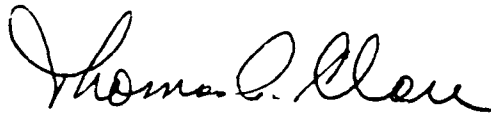
## FOREWORD

To meet future public sector challenges and opportunities, the Naval Surface Warfare Center (NSWC) launched an effort to develop, implement, and institutionalize a strategic planning process in 1982. A corporate-style strategic planning method was chosen. It meant using a formal integrative strategic planning process whose cornerstone is the segmentation of the organization's activities into strategic business units (SBUs). The process has been institutionalized and matured over three planning cycles.

NSWC has accrued numerous tangible and intangible benefits from having worked through the process for three cycles and from having managers who think more strategically. This Executive Summary briefly covers a wide range of the NSWC strategic planning activities and processes required to develop and institutionalize strategic planning in a Navy research and development Center of 5000 employees. A companion report, NSWC MP 89-324, provides much greater detail on the development, implementation, and institutionalization process.

We at NSWC believe the publication of our strategic planning institutionalization process, including successes and the false starts, provides a detailed model for other Navy, Department of Defense, and public sector organizations. NSWC, as a result of its strategic planning efforts, has ownership of core skills that has led to a firm-specific advantage (FSA). This FSA, endogenous to NSWC, is an intangible advantage when competing for and deploying limited public assets. These core skills and organizational advantages can be achieved by other public sector organizations to plan and manage strategically and enhance prosperity into the 21st century.

Approved by:



THOMAS A. CLARE  
Technical Director



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## SECTION 1

### CORPORATE-STYLE STRATEGIC PLANNING

This is an executive summary of a Massachusetts Institute of Technology Alfred P. Sloan School of Management thesis<sup>1</sup> which set out to describe the development, implementation, and institutionalization of private sector corporate-style strategic planning methods in a public sector federal government Department of Defense (DOD) research and development (R&D) organization. **Corporate-style strategic planning was defined as the use of a formal integrative strategic planning process whose cornerstone is the segmentation of the organization's activities into strategic business units (SBUs).** The circumstances at the Naval Surface Warfare Center (NSWC) leading up to the 1982 Board of Director's (BOD) decision to undertake strategic planning are presented. The NSWC planning methodology evolution, specific activities, and strategic management practices associated with the four major periods shown in Figure 1 are summarized. These periods included the preparation period, Cycle I, Cycle II, and Cycle III. The integrative strategic planning methodology<sup>2</sup> of Professors Arnoldo C. Hax and Nicolas S. Majluf, shown in Figure 2, was used as a vehicle for analysis and discussions. This methodology was instrumental in initiating corporate-style planning at NSWC. Research methods included: (1) interviews with executives and managers in NSWC technical and support organizations at the department, division, and program manager levels and (2) the review of NSWC strategic planning documentation. Perspectives, developed from the interview process, are woven throughout the thesis.

Considering the fact that the motivations and forces which drive business to undertake the complexities of corporate-style strategic planning do not exist within the federal sector, one is struck by the amount of progress being made at NSWC in the institutionalization of a systematic strategic planning process. There are many tangible and intangible benefits for the Navy and NSWC employees, managers, and executives directly attributable to NSWC experiences. I have frequently been asked, "Was strategic planning done right or wrong at NSWC?" It could be dangerously misleading to make a "right or wrong" comparison for NSWC or any organization. For organizations considering strategic planning, this point cannot be overstressed because private sector approaches are not equally applicable to government organizations and their particular environmental conditions. Dr. Hill, the Technical Director at NSWC from 1983 to 1989, said: "Productivity for an R&D organization is synonymous with organizational effectiveness--and this is heavily dependent on the degree to which two attributes are present: dedicated, capable people and a sense of purpose and direction."<sup>3</sup> The results of NSWC's strategic planning can only be judged in terms of whether the organization had that sense of purpose and direction which enabled it to cope with the complex nature of the problems and the environment then, as well as in the future. The following is a key question that must be answered:<sup>4</sup>

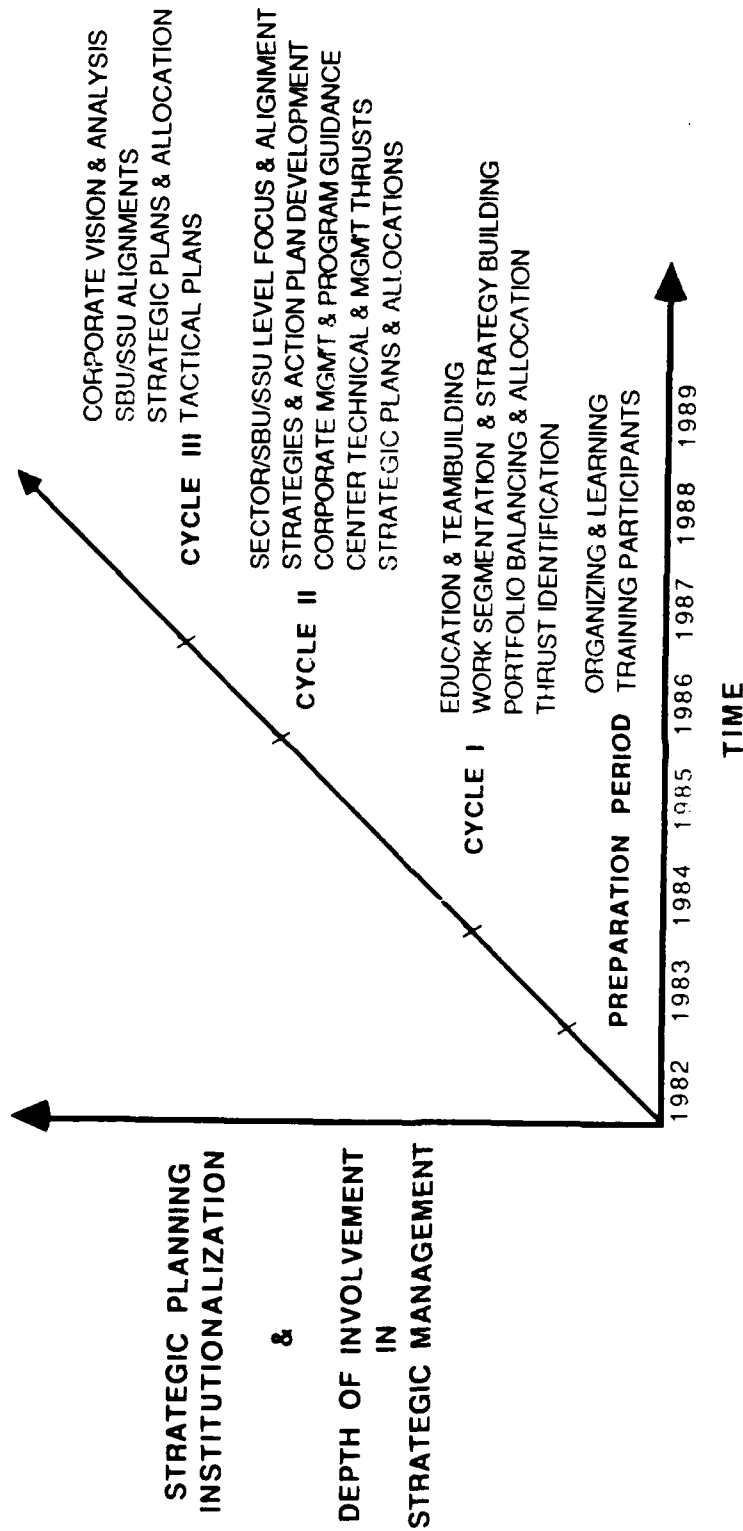
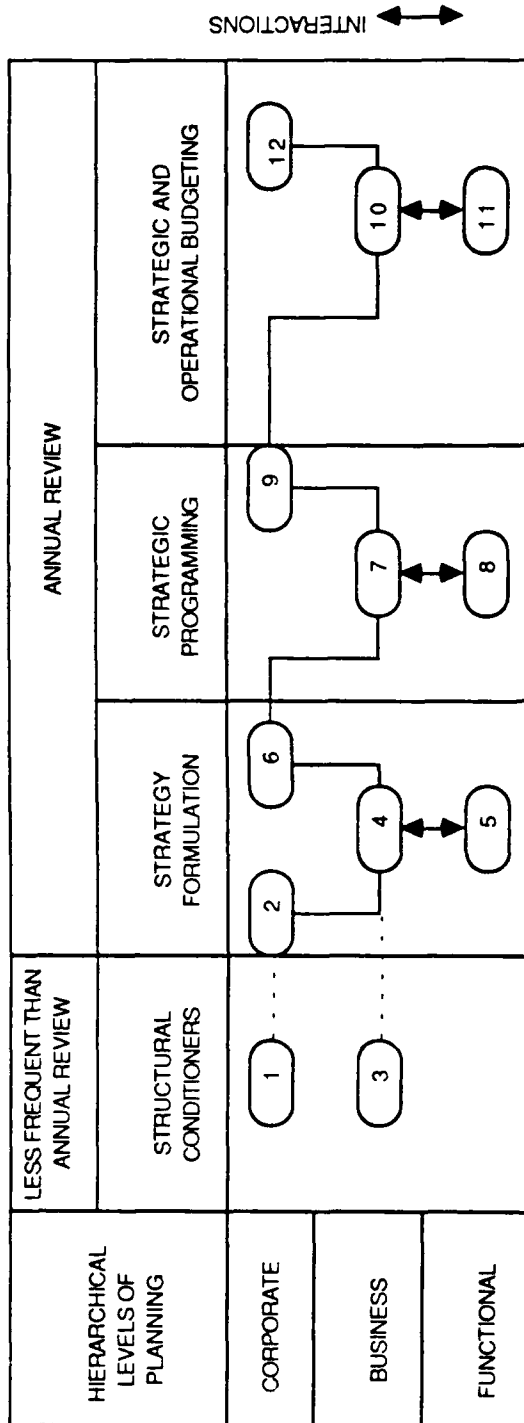


FIGURE 1. NSWC CORPORATE-STYLE PLANNING SUMMARY





1. THE VISION OF THE FIRM: corporate philosophy, mission of the firm, and identification of SBUs and their interaction.
2. STRATEGIC POSTURE AND PLANNING GUIDELINES: corporate strategic thrusts, corporate performance objectives, and planning challenges.
3. THE MISSION OF THE BUSINESS: business scope, and identification of product-market segments.
4. FORMULATION of business strategy and broad action programs.
5. FORMULATION OF FUNCTIONAL STRATEGY: Participation in business strategic planning, concurrence or non-concurrence to business strategy proposals, broad action programs.
6. CONSOLIDATION of business and functional strategies.
7. DEFINITION AND EVALUATION of specific action programs at the business level.
8. DEFINITION AND EVALUATION of specific action programs at the functional level.
9. RESOURCE ALLOCATION AND DEFINITION OF PERFORMANCE MEASUREMENTS for management control.
10. BUDGETING at the business level.
11. BUDGETING at the functional level.
12. BUDGETING CONSOLIDATION AND APPROVAL of strategic and operational funds.

**FIGURE 2. THE FORMAL CORPORATE STRATEGIC PLANNING PROCESS**

(Source: HAX & MAJLUF, 1984, pp. 42 & 43)

Has strategic planning assisted managers in making effective decisions that determine the products and services offered, the clients/sponsors supported, and how best to develop their organization over time to implement those product-, service-, and client-support decisions?

In 1980, internal and external environmental conditions raised the level of management's attention at NSWC to the need for a means which would provide a cohesive focus on the Center's mission and permit some control in shaping its future destiny. The motivation for strategic planning had come, in part, out of the following three primary needs:

1. NSWC, faced with resource constraints, needed a cohesive resource deployment mechanism. However, its mosaic of individual projects and sponsor needs in an environment fostering entrepreneurship and autonomy prevented action.
2. Externally imposed management controls required a systematic process to facilitate major program comparisons both within and across departments for resource allocation and divestment decisions.
3. Rapid technological change in the Navy was creating powerful forces and trends which could, over the long-term, change the character and values of the R&D Center unless the nature of change and the strategic options available were understood.

As a result of the 1982 BOD decision to undertake strategic planning, NSWC has: (1) a corporate "vision of future success," (2) an understanding of the strategic alternatives, (3) a strategy, and (4) strategic and tactical plans. But, more importantly, the organization has numerous and intangible benefits accruing from having worked through the planning process three times and from having managers/executives who thought more strategically. NSWC has acquired core skills that led to a firm-specific advantage (FSA). This FSA, endogenous to NSWC, is an intangible advantage when competing for and deploying limited public assets. It is doubtful that this situation could have developed without the courage and fortitude the BOD exhibited in 1982 in charting a new course for NSWC.

This thesis shows that the institutionalization process is more complex than it seems at first glance. Constraints such as operating in a "zero-sum" game significantly increased the complexity of employing a Hax and Majluf type strategic planning methodology because of the "win/lose" situation. The process was not without psychological, emotional, time, and financial costs. NSWC paid the cost and found that the planning effort was extremely worthwhile.

Readers are cautioned that a full exposition of NSWC's strategic planning is not possible within the constraints of a masters thesis. The nearly 8 years of detailed planning efforts and activities cannot be contained in this document. Discussions with the NSWC planners who toiled over developing and institutionalizing the process would be necessary for more in-depth information. Some important issues for future exploration include: (1) the difficulties government agencies have in divesting and exiting from sponsors' programs to redistribute critical resources, (2) the impact and relationship between NSWC's culture and values and the strategic planning process, and (3) the integration and coupling of organizational support functions with

the technical sectors/SBUs that lead to effective planning processes and strategic management. NSWC could use academia to investigate these issues. The potential exists for NSWC to have the kind of impact on government agencies that General Electric's strategic planning had on industry.

In summarizing how NSWC met the challenges of pioneering corporate-style strategic planning at an R&D center, we examine: (1) NSWC's progress; (2) the intangible benefits, rewards, and leadership; (3) the strategic planning staff's function; and (4) some areas of opportunity for future NSWC strategic planning growth.

## SECTION 2

### AN OVERVIEW OF PROGRESS

For executives, general managers, and planning participants, the institutionalization of strategic planning implies: (1) a general understanding of the level and kinds of issues which the methodology and process can address; (2) a decision-making process for handling new problems and for dealing with old ones more effectively through careful deployment of resources between competing demands; (3) contributions from a larger portion of management because of their involvement in strategic thinking, strategic objectives, strategy development, and the coupling of strategic activities to tactical execution; and (4) an understanding of the strategic options available to the agency which reflect organizational activities and the outside environment. NSWC made the transition from the long-range (5-year) linear extrapolation planning of the "today" programs to strategic management based on a composite long-range strategic posture which looked at 10- to 20-year future time frames that coupled with tactical 3- to 5-year action plans. The items listed above have been put into place successfully and are being practiced. Figure 3 summarizes the key areas and elements associated with this transition over the three planning cycles.

One way to ascertain the effect on the Center of the institutionalization of the strategic planning process is to reexamine the 1982 BOD concerns and initial planning objectives in light of the results of the planning process.

| SENIOR EXECUTIVE CONCERNS   | BETTER OFF/WORSE OFF |
|---|----------------------|
| reactive rather than proactive<br>to market opportunities                   | BETTER               |
| anticipate programs early & get<br>in early in the life cycle               | BETTER               |
| making the case for acquiring<br>facilities                                 | BETTER               |
| understanding future impacts<br>of current long-term program<br>commitments | MUCH BETTER          |
| resource deployment for best<br>future benefit                              | BETTER               |
| influence in shaping the<br>Center's future                                 | MUCH BETTER          |

| AREA/ELEMENT             | CYCLE I  | CYCLE II                               | CYCLE III                  |
|--------------------------|--|--|----------------------------|
| IMPLICIT ASSUMPTIONS     | SOME AUTONOMY WOULD BE RELINQUISHED FOR CORPORATE GOOD EXECUTIVE & MGMT COOPERATION & AGREEMENT IS POSSIBLE ABILITY & DISCIPLINE TO IMPLEMENT RESULTS EXISTS RESULTS WOULD IMPROVE NSWC's PERFORMANCE STRATEGIC ISSUES COULD BE IDENTIFIED & MANAGED |  |                            |
| EXPLICIT ASSUMPTIONS     | ZERO SUM GAME CENTER WORKFORCE MAXIMUM OF 5000 BALANCED CENTER WORK REQUIRED TO MAINTAIN R&D CHARACTER   |  |                            |
| VISION                   | PHILOSOPHY & VALUES ONLY   | BASIC (ORAL ONLY) TECH & MGMT GUIDANCE | CORPORATE VISION           |
| ANALYSIS LEVELS          | SECTOR/SBU/PL  | SECTOR/SBU/SSU/PL                      | CORPORATE/SECTOR/SU        |
| STRATEGY LEVELS          | SECTOR/SBU   | SECTOR/SBU/SSU                         | CORPORATE/SECTOR/SU        |
| PLANS                    | LIMITED  | STRATEGIC/SU                           | STRATEGIC/TACTICAL         |
| EVAL & CONTROL PROCESSES | NONE   | NONE IMPLEMENTED DELEGATED             | NONE IMPLEMENTED DELEGATED |
| HRM & REWARD SYSTEM      | WEAK   | WEAK                                   | WEAK                       |
| RESOURCE ALLOCATION      | NOT TOTAL WORK-YEARS ONLY  | NOT TOTAL WORK-YEARS ONLY              | NOT TOTAL WORK-YEARS ONLY  |
| STRATEGIC MGMT PRACTICE  | INFANCY  | NOVICE PHASE                           | ADVANCED BEGINNER PHASE    |

FIGURE 3. NSWC CORPORATE-STYLE DETAILED STRATEGIC PLANNING SUMMARY

| AREA/ELEMENT                           | CYCLE I   | CYCLE II   | CYCLE III  |
|--|---|--|--|
| METHODOLOGY<br>&<br>PROCESS            | STRATEGIC PLANNING<br>EDUCATION<br><br>PORTFOLIO PLANNING<br>FOCUS<br><br>SECTOR/SBU/SSU<br>DEFINITION<br><br>NON-CONGRUENCY BTW<br>PLANNING STRUCTURE/<br>LINE ORGANIZATION<br><br>DELPHI & NGT<br>WORKSHOPS(CTR/DEPT)<br>PARTICIPATIVE MGMT   | STRATEGIC PLANNING<br>SECTOR/SBU/SSU LEVEL<br><br>RECOGNIZED NEED FOR<br>STRATEGIC PLANNING<br>INFO/DATA BASE<br><br>DELPHI/NGT<br>WORKSHOPS(CTR/DEPT)<br>PARTICIPATIVE MGMT   | STRATEGIC PLANNING<br>SECTOR/SU MGRS<br><br>TACTICAL PLANNING<br>LINE/PROG MGRS<br><br>IMPROVED INFO/DATA BASE<br><br>WORKSHOP<br>PARTICIPATIVE MGMT<br>REDUCED PAPERWORK              |
|  | STRATEGIC PLANNING<br>EDUCATION<br><br>THRUST/KEY ISSUE<br>IDENTIFICATION<br><br>WORK SEGMENTATION<br><br>PROTECTION SYSTEMS<br>DEPARTMENT ESTB<br>& SYNERGY<br><br>COMMON LANGUAGE FOR COMMUNICATIONS- MORE LONG-RANGE/STRATEGIC THINKING<br>FRAME WORK FOR ARTICULATING THE BUSINESS- CORPORATE VIEW FORCING FUNCTION<br>UNDERSTANDING CORP FIT OF TECH WORK- APPRECIATION SUPPORT SERVICE WORK & COSTS<br>VISION OF WHO WE ARE & WHERE WE WANT TO GO BOTH INTERNALLY/EXTERNALLY<br>CENTER DIALOGUE, UNDERSTANDING, INTERNALIZATION OF GOALS, OBJECTIVES, STRATEGIES<br>NSWC RECOGNIZED AS FORWARD PLANNER WITH CORE SKILL- FIRM SPECIFIC ADVANTAGE | STRATEGIC PLANNING<br>PROCESS & PLAN<br><br>DEFINED TECH & MGMT<br>THRUSTS/CHALLENGES<br><br>DECISION MAKING BASED<br>ON STRATEGIC PLAN<br><br>CORP MGMT & PROGRAM<br>GUIDANCE | FUTURE VISION/POSTURE &<br>STRATEGIC OPTIONS<br><br>STRATEGIC & TACTICAL<br>PLANS<br><br>STRATEGIC THINKING/<br>DECISION-MAKING<br><br>COMPETING RESOURCE DEMAND<br>ALLOCATION PROCESS |
| TANGIBLE<br>&<br>INTANGIBLE<br>RESULTS | SECTOR/SBU/SSU RESPONSIBILITY & AUTHORITY<br>DRIVEN REALIGNMENT & REDEFINITION<br><br>LIMITED MOVEMENT/CREATION ORGANIZATIONAL ENTITIES<br>NOT 100% CONGRUENCY BTW PLANNING & LINE ORG  |  |  |

FIGURE 3. (CONT.)

| AREA/ELEMENT                 | CYCLE I  | CYCLE II | CYCLE III |
|------------------------------|--|----------|-----------|
| COST                         | <p>PSYCHOLOGICAL AND EMOTIONAL CONFLICT/AMBIGUITY/FRUSTRATION FROM NEW PROCESS/PROCEDURES AND CULTURAL/ORGANIZATIONAL CHANGE</p> <p>SIGNIFICANT EXECUTIVE &amp; MANAGER TIME &amp; ENERGY DEMAND</p> <p>FEW EMPLOYEES LOST WHO COULDN'T RECONCILE WITH THEIR PERSONAL STYLE</p> <p>REDUCED ENTREPRENEURIAL FLAIR &amp; FREEDOM BECAUSE CYCLES I &amp; II STRATEGIC PLANNING FOCUSED BELOW SUBSU LEVELS &amp; CREATED FEELING EVERYTHING BEING MANAGED TO LOWEST LEVEL (NOT ACTUALLY PROVEN BUT SIGNIFICANT CONCERN BECAUSE ENTREPRENEURIAL SPIRIT SO VALUED BY NSWC)</p>   |          |           |
| ISSUES<br>&<br>OPPORTUNITIES | <p>COUPLING OF EVALUATION &amp; CONTROL PROCESSES TO STRATEGIC/TACTICAL PLANS NOT ACHIEVED/ CURRENT METHOD OF DELEGATION TO LINE MANAGERS MAY REDUCE EFFECTIVENESS OF STRATEGIC MANAGEMENT</p> <p>SES/MGR PMRS OBJECTIVES NOT UNIFORMLY COUPLED TO STRATEGIC/TACTICAL PLANS &amp; LINE SPECIFIC PERFORMANCE EXPECTATIONS ARE DETERMINED DEPENDING ON DEPARTMENT/DIVISION HEAD VIEW OF THE PLANNING PROCESS (NO GUIDELINES OR POLICY EXISTS)</p> <p>STRENGTHENING OF SUPPORT SERVICES SECTORS &amp; SSUs COUPLING TO SBUs PLANS DEVELOPMENT FOR STRATEGIC/TACTICAL PLANNING &amp; PRACTICE OF STRATEGIC MGMT COULD BE IMPROVED (PLOWING NEW GROUND/NO EXAMPLES TO FOLLOW)</p> <p>TRANSITION TO STRATEGIC MANAGEMENT NOT DEALT WITH EFFECTIVELY; FOR STRATEGIC MGMT PURPOSES NEITHER TOTAL RESOURCE ALLOCATION NOR TOTAL RESOURCE PRIORITIZATION BASED ON DEVELOPED PLAN HAS BEEN ACHIEVED</p> <p>POWERFUL LEADERSHIP/ EMPLOYEE MOTIVATIONAL OPPORTUNITIES &amp; BENEFITS OF USING THE VISION/FUTURE POSTURE/STRATEGIES REMAIN UNTAPPED (WRITTEN CRAY RESEARCH INC STYLE &amp; JOHNSON &amp; JOHNSON CREDO LEVERS FOR SIMULTANEITY AND CORPORATE GLUE; SEE REFERENCES 5 &amp; 6)</p> |          |           |

FIGURE 3. (CONT.)

| AREA/ELEMENT   | CYCLE I  | CYCLE II | CYCLE III |
|--|--|----------|-----------|
| <p style="text-align: center;">FUTURE<br/>CONSIDERATIONS</p> | <p>THE JURY IS STILL OUT ON THE LONG TERM SURVIVAL OF NSWC'S CORPORATE-STYLE PLANNING; THERE IS A CERTAIN FRAGILITY ASSOCIATED WITH THE EFFORT BECAUSE OF THE REQUIREMENT FOR CIVILIAN/MILITARY LEADERSHIP PROCESS CHAMPIONS &amp; WHOLEHEARTED SUPPORT OF THE SENIOR EXECUTIVES; A CHALLENGE FACING NSWC IS TO MAINTAIN THE STRATEGIC PLANNING MOMENTUM.</p> <p>THE REDUCTION OF THE CORPORATE-STYLE STRATEGIC PLANNING STAFF TO A SINGLE INDIVIDUAL COULD SEND THE WRONG MESSAGE REGARDING THE VALUE/IMPORTANCE PLACED ON NSWC'S STRATEGIC/TACTICAL PLANNING EFFORT &amp; JEOPARDIZE FUTURE CYCLES.</p> <p>BY NOT FOLLOWING A HAXMAJULUF TYPE METHODOLOGY MORE CLOSELY THE EFFECTS OF THE INTEGRATIVE PROCESS ARE NOT ACHIEVED AND CYCLE EMPHASIS IS NOT ON ALL THE PROCESSES REQUIRED TO ACHIEVE MANAGEMENT EVALUATION &amp; CONTROL; THE HAXMAJULUF PROCESS STEPS SHOULD BE RE-EXAMINED FOR APPLICABILITY (FOR EXAMPLE THE CYCLE ONE FOCUS ON STRATEGIC AT THE SECTOR LEVEL &amp; BELOW MITIGATED THE UNDERSTANDING OF THE IMPORTANCE OF THE CORPORATE VISION, COUPLING OF STRATEGIC &amp; TACTICAL PLANNING, &amp; NEED FOR MGMT EVALUATION &amp; CONTROL).</p> <p>NSWC'S CORPORATE-STYLE STRATEGIC PLANNING HAS NOT DEGENERATED TO A MECHANISTIC PROCESS OR PROCEDURE; NSWC'S MUST BE VIGILANT TO STRATEGIC PLANNING BECOMING BOILER PLATE FOR THE OLD STYLE LONG-RANGE PLANNING.</p> <p>THE LACK OF CLEAR UNDERSTANDING AND APPRECIATION FOR THE ACHIEVED NSWC CORPORATE-STYLE STRATEGIC PLANNING BENEFITS &amp; REWARDS BY EXECUTIVES, MANAGERS, &amp; EMPLOYEES NEGATES POTENTIAL SYNERGISTIC EFFECTS OF ITS INSTITUTIONALIZATION</p> |          |           |

FIGURE 3. (CONT.)



## INITIAL OBJECTIVES

Develop strategic planning system and processes to facilitate generation of Center plans, their implementation, and provide for review and control

Produce Center strategic plan delineating future product mix, objectives, and strategies for reaching these objectives

Build planning culture using participative planning and decision methods to improve organizational performance

## ACHIEVED/ NOT ACHIEVED

ACHIEVED—system and processes for strategic and tactical plan generation and implementation

NOT ACHIEVED—processes for review and control; total resource allocation for strategic management

ACHIEVED—Cycles II and III along with prioritization and limited resource allocation

NOT ACHIEVED—total divestiture of some programs for optimal deployment of resources

ACHIEVED—planning institutionalized; line managers considered better off with than without; future direction set with priorities, strategy, and plans

It is important to have an understanding of, and appreciation for, the tangible and intangible benefits of the corporate-style strategic planning as accrued by NSWC. Involvement by managers in the intense day-to-day operations of an organization did cause a loss of perspective on these benefits and their value. Figure 3 summarizes some of the tangible and intangible benefits NSWC received from the planning process. Specific interview data also provided insight into managers' perspectives on the intangible benefits and rewards of strategic planning and the significance of the leadership role.

### SECTION 3

#### INTANGIBLE BENEFITS, REWARDS AND LEADERSHIP

The institutionalizing of strategic planning is easy to say but hard to do. It takes a long time (5 years or more) and enormous amounts of discussion and training. Most importantly, it means that each executive, manager, scientist, and engineer must do things that he or she may not want to do. One of the pivotal initial NSWC policy decisions was that line executives and managers would develop the plans and that staff would facilitate the process. These executives and managers were very frank during the interviews. Specific examples of particular strategic planning problems were discussed. Despite problems, interviewees thought they were better off now with NSWC's corporate-style strategic planning than they had been before its introduction. Some people said that the cultural change [in the NSWC method of doing business] and going through the process for the first time [i.e., generating the initial data, information packages, strategies, options, and plans] had been painful. Most would have stopped if given the opportunity. However, there were many expressions in interviews of intangible benefits and rewards that had overcome or compensated for the costs. Some of these expressions follow.

1. "In the competitive arena, the Center is unique among the Navy R&D Centers in being able to use the strategic plan to articulate positions and decision rationale; it sets us apart from competitors for obtaining resources and it works."
2. "Provides a common language to talk to each other and stimulates discussion which should have been taking place but was not."
3. "Forced us to think long-range/strategically and identify near-term resource requirements to achieve our long-range goals."
4. "Provided an articulate framework for conducting business, raised the level of attention of management issues, helped define and plan the solutions."
5. "Provided forcing functions for taking and coordinating a more corporate view."
6. "Provided a focused thought process and better understanding of each department's work and its corporate fit."
7. "Provided an appreciation of the support service departments and the costs of their services."
8. "Helped fine tune the corporate resources, tie them to where we want to go, and cut out the marginal efforts to redeploy resources."

9. "Enabled a better tying of fiscal planning to where the Center is going and an ability to explain it."
10. "Provided the leadership for a vision of who we are and where we want to go both internally and externally."
11. "Main value was the dialogue, discipline, common understanding, and internalization of goals, objectives, and strategies."
12. "It's a good thing to know where we're going, why, and how we will get there; it's unique."
13. "The strategic planning results have been successfully used to support headquarter's resource requests and to reclaim and restore cuts for critically needed resources."
14. "The plan has been used to provide an understandable rationale to NSWC's major sponsors for why unlimited resources were not available to apply to their programs."

The similarity between this list and the benefits listed in the literature<sup>7</sup> is not surprising. What was surprising was the difficulty managers had, as they worry about day-to-day problems, in visualizing the importance and the value of strategic planning relative to operational concerns. I believe this continually strong tug between "today type pressures" and organizational costs [psychological, emotional, time, energy, and financial] was a significant factor in the length of time required to institutionalize strategic planning at NSWC. This problem was compounded by the high up-front commitment of time and energy needed before seeing major short-term change. It was because of forces like these that strong and continued leadership in the form of "process championship" was absolutely essential.

Figure 4 shows the changes in both the senior civilian (Technical Director (TD)) and military (Commanding Officer (CO)) leadership during this 8-year period. There were four COs and three TDs. Any one of these individuals, had their management ideas differed from those associated with strategic planning, could have stopped or changed the process. It is interesting that the original ethos which convinced top management that strategic planning offered a thoughtful process that would allow NSWC to have some influence on shaping its destiny persisted for the 8 years.

At the beginning of the strategic planning process, department heads had complete autonomy and were held directly accountable for their own departments. Centralization of power and authority for corporate resource allocation was antithetical to NSWC managerial thinking. Managers took more of a departmental view than one that considered corporate resource interests. At the beginning of this process the BOD was not strong enough corporately to be the "process champion." One of the implicit assumptions in developing the strategic planning process was that department and division heads would give up some of their autonomy for the corporate good. BOD members recognized that good corporate level management systems had to be put in place. In 1982 the corporate philosophy stated: "The following principles will serve as the basis for Center management: Management will operate the Center corporately by utilizing those practices that permit individuals and the organizational units of the Center to attain the Center's goals. The Center is one corporate entity. All organizational units are equally important

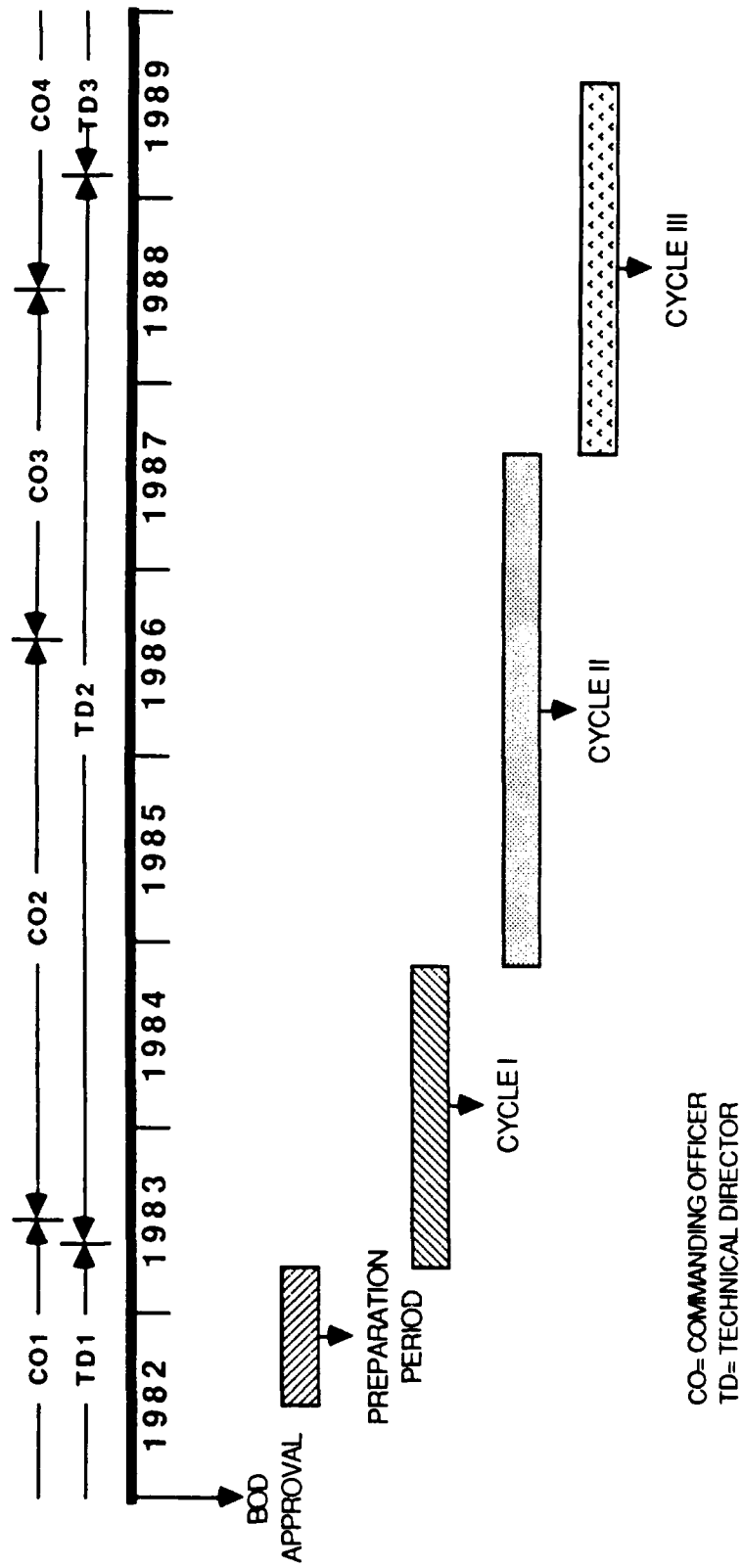


FIGURE 4. NSWCO/TO TENURE AND THE TOP LEVEL STRATEGIC PLANNING PERIODS

and necessary to achieve mission success."<sup>8</sup> Recall that NSWC executives were working in a "zero-sum resource game" [win/lose]; naturally they did not want to let the department resources decline or to give up resources to another group for the good of the corporation. This problem occurs in industrial firms as well. One of the Chief Executive Officer's (CEO's) functions is to provide the leadership necessary for board members to take a corporate view of the firm rather than to be arguing always for the particular interests of the specific division for which they are held directly accountable. At NSWC the COs and TDs believed in and fostered the institutionalization of the strategic planning process for the entire 8-year period. They took a strong positive role through personal commitment of their time and direct support. I believe it was this leadership and CO/TD championing which resulted in the progress achieved. These executives were a key factor in the success of the process. An additional benefit of institutionalization was the achieving of a BOD body that thought and worked together more corporately. The interactive methodology, through the process of information generation and presentation, actually made it easier for department heads to harmonize conflicting objectives between their departments and the Center.

The COs and TDs worked closely with the strategic planning staff. The development, implementation, and institutionalization of the process was delegated to a small staff. Because the planning staff was a key factor in the success of this process, its functions are discussed briefly below.

## SECTION 4

### THE STRATEGIC PLANNING STAFF

The strategic planning staff's function was one of guiding and shepherding the Center through the process of development and institutionalization. They accomplished this by: (1) knowing what was going on in the external strategic planning environment [i.e., what worked, what didn't work, and why]; (2) understanding and knowing the internal culture of NSWC; and (3) knowing the best way to make the process work internally given the NSWC culture and value system [i.e., how far and how fast to push]. The work of the staff included: (1) developing materials and educating the Center, (2) collecting data and assembling the Center data packages, (3) developing formats and answering questions, and (4) analyzing and effectively presenting difficult material. Starting the education process was a mammoth task that included defining terminology, preparing training materials, orchestrating workshops, and teaching. Because of the NSWC policy that "line managers would prepare the plans," the planning staff had to be an enabling group that served as catalyst and facilitator in getting people to think. Staff members had to be competent and understand both the language of the organization and the language of strategic planning. NSWC staff clearly understood their role. Results were facilitated because of the fact that staff members had been line managers and had a significant appreciation for line management problems. The complexity of the staff function should not be underestimated by agencies undertaking strategic planning. If it is, an organization jeopardizes its entire effort right from the beginning. At least one person on the staff must have strategic planning expertise and be a process-orientated individual.

One could hypothesize that the institutionalization process would have proceeded faster if more emphasis had been placed by staff on transitioning from strategic planning to tactical planning in Cycle I. This may have been the case and here I stress may have been. Cycles I and II focussed on the strategic planning aspects of the process. According to the Hax/Majluf methodology, tactical planning is coupled to strategic planning. I believe that the staff understood the coupling requirements, but they could not move the organization to achieve coupling at a faster rate. Perhaps the staff should have spent more time establishing the evaluation and control processes in all cycles. But staff can only establish processes if the BOD is ready and willing to accept them. Evaluation and control functions belonged to the BOD and to CO/TD senior executives. The staff had no delegated authority to execute; they had only that which was implied by Command's direction to them. Therefore, they had to rely on Command's legitimization of their power and responsibility. The complexities of these human resource issues coupled with NSWC's cultural values makes it difficult to imagine that the time of the process overall could have been significantly reduced in length. Let us not forget the cultural shock experienced in Cycles I and II from multiple changes. These changes were in: (1) the mode of business operation and (2) the introduction of corporate-style strategic planning. Additionally, during Cycle II the strategic planning staff was reduced from two technical persons and a secretary to a single individual. The two technical

individuals rotated back to positions in technical departments. Even with the strategic planning institutionalization process well under way, this move could have jeopardized the strategic planning effort; it could have sent a negative message to executives and managers regarding the importance of strategic planning. NSWC did not have a formal plan for rotating individuals from departments to the strategic planning staff. However, they did recognize the value for transferring knowledge of rotating members from line departments to the planning staff. It is interesting that the support departments who have had the most difficulty getting strategic support units (SSUs) integrated into the strategic planning process have never rotated a senior individual to the strategic planning staff. It could prove beneficial for them to do this.

The unit with strategic planning responsibility must be given freedom to develop the process in an entrepreneurial fashion and yet be strongly supported by the CO and TD in their roles of process champions.

## SECTION 5

### AREAS OF OPPORTUNITY FOR DEVELOPMENT

Within the Navy, it is recognized and accepted that NSWC has done a good job with its strategic planning. Additional opportunities and challenges for innovation, work force improvement, and leadership exist. Management at NSWC exercises leadership in the execution of complex organizational activities. Decisions to accept challenges and proceed in areas of opportunity are not "black and white." They require careful consideration and the same courage and fortitude that was demonstrated in 1982. NSWC must consider the following questions and issues in developing strategic planning and management in the future:

1. Should NSWC move toward the coupling of strategic and tactical planning management evaluation and control processes with the current methodology implementation?
2. Is it desirable to practice strategic management with total resource prioritization and allocation of resources based on developed strategic and tactical plans?
3. Could the communication and explanation of NSWC's vision, future posture, and strategies to employees provide leadership and motivational synergism for NSWC?
4. Would coupling executive and line manager performance expectations and rewards [by the Senior Executive Service (SES), and Performance Management and Recognition System (PMRS) objectives] to strategic/tactical plans foster strategic management and strategic/tactical accountability?
5. Could strengthening the support department and SBU integration into the strategic/tactical planning processes and strategic management of the Center enhance productivity?
6. Could a careful examination of the Hax/Majluf integrative methodology (12 steps) and its applicability to NSWC future cycles improve the process results?
7. Would communicating to employees a clear understanding of the tangible and intangible benefits and rewards achieved by all NSWC's people during the 1982 to 1989 strategic planning institutionalization effort reinforce their personal commitment to making it successful?
8. Does the responsibility and authority delegated to SBU managers require clearer delineation for long-term success?



**What NSWC has achieved cannot be overemphasized. NSWC has achieved success in the process itself and has helped key decision makers to think and act strategically. NSWC has not let its strategic planning degenerate into a mechanistic process nor has it allowed the process to run the management. The organization's leadership must continually resist allowing strategic planning to become "boiler plate" or to atrophy into the old style, long-range linear extrapolation planning. Few organizations reach the level of maturity and experience with corporate-style strategic planning that NSWC now has and which permits it to leverage its strength while counterbalancing its limitations in the wise deployment of resources and the shaping of future directions.**

## SECTION 6

### CONCLUDING THOUGHTS

NSWC is faced with powerful forces and trends which could change the character and values of this R&D Center. It recognizes and understands the implications of those forces. It now knows what its strategic issues and options are as a result of its corporate-style strategic planning process.

The primary challenge to NSWC is to incorporate successfully the 1997 R&D Center Model<sup>9</sup> and its vision of success. NSWC and Navy R&D centers must recognize the immensity and scope of the forces working to prevent their achieving a future "vision of success." Those who plan and manage strategically will be able to carry out the necessary organizational changes and will probably survive and prosper into the 21st century. Those who fail to understand the need for strategic planning and management or who are inept in their ability to deal with it are likely to be doomed to a perpetual reactive strategy. Hardening of the arteries will set in. Only farsighted federal managers will be able to inject new vitality, keep the flame alive, and meet challenges and unprecedented opportunities head-on. Organizations led by this kind of manager will be the signposts of the future.<sup>10,11</sup>

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